

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Seiji Asaoka et al.

Serial No: 10/049,357

Filing Date: May 22, 2002

Title: COSMETIC CONTAINING
AMPHOTERIC POLYURETHANES

Docket No: SPG 6583 P1US

Examiner: Kara Renita McMillian

Group Art Unit: 1617

Confirmation Number: 9914

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

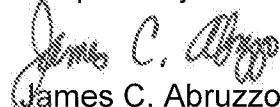
BRIEF ON APPEAL

Further to the Notice of Appeal filed September 25, 2008, Appellants are submitting this Appeal Brief for the above-identified application. Appellant hereby requests reconsideration and reversal of the Final Rejection of claims 10-14, 16, 17, 19 and 20.

In compliance with 37 C.F.R. § 41.37(a)(1), this Brief is being timely filed within the time allowed for response to the action from which the Appeal was taken, with a three-month extension of time pursuant to 37 C.F.R. § 1.136(a)(1).

The fees for filing a Brief in support of an Appeal under 37 C.F.R. § 40.20(b)(2), together with any extension fee required in connection with the filing of this Brief, are provided herewith.

Respectfully submitted,



James C. Abruzzo
Attorney for Applicants
Reg. No. 55,890

Akzo Nobel Inc.
Legal & IP
120 White Plains Road, Suite 300
Tarrytown, NY 10591
(914) 333-7448

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	2
II. REAL PART IN INTEREST	3
III. RELATED APPEALS AND INTERFERENCES	4
IV. STATUS OF THE CLAIMS	5
V. STATUS OF THE AMENDMENTS	6
VI. SUMMARY OF CLAIMED SUBJECT MATTER	7
VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	9
VIII. ARGUMENT	10
A. Rejection of Claims 10-14, 17 and 20 under 35 U.S.C. 103(a)	10
1. Features of the Claimed Invention	12
2. Response to Rejection of Claims 10-14, 17 and 20 under 35 U.S.C. 103(a)	12
a. The Combination of Bhatt in view of Kim Does Not Yield an Amphoteric Urethane Resin as Claimed By Appellants	13
b. The Reliance on the Disclosure of Bhatt for the Claimed "Water Soluble Water-Soluble Resin Other than an Amphoteric Urethane Resin" Is Improper	17
B. Rejection of Claims 11-13, 16 and 19 under 35 U.S.C. 103(a) and Response with Respect Thereto	
IX. CONCLUSION	23
X. CLAIMS APPENDIX	24
XI. EVIDENCE APPENDIX	26
XII. RELATED PROCEEDINGS INDEX	27

I. INTRODUCTION

Pursuant to the provisions of 35 U.S.C. §134 and 37 C.F.R. §1.191, this paper is submitted as a brief setting forth the authorities and arguments upon which Appellants rely in support of the Appeal from the Final Rejection of claims 10-14, 16, 17, 19 and 20 entered in the above-identified patent application on March 25, 2008 and maintained in the Advisory Action mailed October 30, 2008.

II. REAL PART IN INTEREST

The real part in interest is Akzo Nobel N.V., Arnhem, The Netherlands.

III. RELATED APPEALS AND INTERFERENCES

There are no prior or pending appeals, interferences, or judicial proceedings known to Appellant, the Appellants' legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending Appeal.

IV. STATUS OF THE CLAIMS

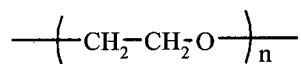
Claims 10-14, 16, 17, 19 and 20 are currently pending, with claims 1-9, 15 and 18 having been canceled. All pending claims, namely claims 10-14, 16, 17, 19 and 20, stand finally rejected and are appealed.

V. STATUS OF THE AMENDMENTS

An Amendment after the Final Rejection was filed on September 25, 2008. In the After-Final Amendment claim 18 was canceled. Although not indicated in the Advisory Action dated October 30, 2008, it is believed that the amendment canceling claim 18, being compliant with 37 C.F.R. § 1.116(b)(1), was entered.

VI. SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention generally relates to cosmetic compositions that comprise a blend of an amphoteric urethane resin and a water soluble resin other than an amphoteric urethane resin. Citations to the specification providing support for the recited claim limitations are stated in this section in parentheses. In an exemplary embodiment of the invention, such as recited in claim 10, the invention is directed to a cosmetic composition. The cosmetic composition comprises a blend of an amphoteric urethane resin having at least one carboxyl group and at least one tertiary amino group in one molecule, and a water-soluble resin other than an amphoteric urethane resin. (Specification, at page 1, lines 20-23; page 15, line 3 to page 18, line 10; page 23, line 16 to page 24, line 18). The blend of the amphoteric urethane resin and water soluble resin provide a cosmetic resin having both touch and durability versus a cosmetic composition having only a water-soluble resin or an amphoteric urethane resin. (Specification, at page 1, lines 5-19). The amphoteric urethane resin is formed from the reaction of a polyol chosen from polyester polyol and/or polyether polyol, a polyisocyanate, a compound having active hydrogen(s) and carboxyl group(s), and a compound having active hydrogen(s) and tertiary amino group(s). (Specification, at page 4, lines 4-18). In addition, the amphoteric urethane resin has structural units derived from ethylene oxide (EO) of the following general formula –



wherein n is 20 to 120. (Specification, at page 9, lines 14-21).

Claims 11 is directed to the cosmetic composition of claim 10, wherein the water-soluble resin is a nonionic resin. (Specification, at page 15, lines 4-8).

Claim 12 is directed to the cosmetic composition of claim 10, wherein the water-soluble resin is an anionic resin. (Specification, at page 15, lines 4-8).

Claim 13 is directed to the cosmetic composition of claim 10, wherein the water-soluble resin is a cationic resin. (Specification, at page 15, lines 4-8).

Claim 14 is directed to the cosmetic composition of claim 10, wherein the water-soluble resin is an amphoteric resin. (Specification, at page 15, lines 4-8).

Claim 16 is directed to the cosmetic composition of claim 10, wherein the amphoteric urethane resin has in its structure at least one polysiloxane bond. (Specification, at page 15, lines 4-7). (Specification, at page 12, lines 4-6).

Claim 17 is directed to the cosmetic composition of claim 10, wherein the amphoteric resin is in an aqueous liquid. (Specification, at page 14, lines 16-17).

Claim 19 is directed to the cosmetic composition of claim 16, wherein the amphoteric resin is in an aqueous liquid. (Specification, at page 14, lines 16-17).

Claim 20 is directed to the cosmetic composition of claim 10, wherein such composition is selected from the group consisting of a hair cosmetic, a skin care cosmetic and a make-up cosmetic. (Specification, at page 3, line 21 to page 4, line 3).

VII. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on Appeal are summarized as follows:

Whether claims 10-15, 17 and 20 are unpatentable under 35 U.S.C. § 103(a) as obvious over U.S. Patent Application Publication No. 2002/0071811 ("Bhatt") in view of U.S. Patent No. 6,335,003 ("Kim").

Whether claims 11-13, 16 and 19 are unpatentable under 35 U.S.C. § 103(a) as obvious over Bhatt in view of Kim as applied to claims 10-15, 17 and 20, and further in view of U.S. Patent No. 5,972,354 ("de la Poterie") in view of U.S. Patent No. 5,100,658 ("Bolich, Jr.").

VIII. ARGUMENT

As set forth in the final Official Action dated March 25, 2008, the Office rejects claims 10-15, 17 and 20 as unpatentable under 35 U.S.C. § 103(a) as obvious over U.S. Patent Application Publication No. 2002/0071811 ("Bhatt") in view of U.S. Patent No. 6,335,003 ("Kim"). The Office also rejects claims 11-13, 16 and 19 as unpatentable under 35 U.S.C. § 103(a) as obvious over Bhatt in view of Kim as applied to claims 10-15, 17 and 20, and further in view of U.S. Patent No. 5,972,354 ("de la Poterie") in view of U.S. Patent No. 5,100,658 ("Bolich, Jr."). The grounds of rejection are summarized below.

Appellants respectfully traverse the Office's rejections and in response to the final rejection, Appellants provide the following distinguishing commentary, which is believed to place the present case in condition for allowance. Reversal of the final rejection of all of the pending claims is respectfully requested.

A. Rejection of Claims 10-14, 17 and 20 under 35 U.S.C. 103(a)

As a preliminary matter, it should be noted that the Bhatt reference has a filing date of October 29, 2001 and a publication date of June 13, 2002. In comparison, the present application has an earlier international filing date of August 10, 2000 and a priority date of August 10, 1999, based on JP 11-226558. Consequently, the Bhatt reference, namely Pub. No. 2002/0071811, cited by the Office is not prior art to the present application. However, the Bhatt reference cited by the Office is a division of Application Serial No. 09/437,883, filed November 9, 1999, which is a division of Application Serial No. 08/717,427, which was filed on September 20, 1996 and issued as U.S. Patent No. 6,007,793 on December 28, 1999. Hence, the Bhatt reference, by virtue of its parent application, namely Application No. 08/717,427, is considered to be applicable as prior art under 35 U.S.C. § 102(e). For purposes of this Brief, however, citations to "Bhatt" will refer to Pub. No. 2002/0071811, as cited by the Office.

In the final Office Action, the Office rejected claims 10-15, 17 and 20 as obvious over Bhatt in view of Kim. More specifically, the Office asserted that Bhatt discloses

hair spray compositions containing a carboxylated polyurethane, in which the polyurethane contains polyoxyalkylene units, such as polyoxyethylene soft segments that impart hydrophilicity to the polyurethane. (Office Action dated March 25, 2008, page 5). The Office further asserted that “[a]mines, such as ethylenedamine, propylenedamine, monoethanolamine, and diglycolamine, can be added to the polyurethane resin reaction mixture.” *Id.* According to the Office, Bhatt discloses that the polyurethane resin can be made from polyoxyethylene diols having a molecular weight of 400-20,000, and consequently, the number of ethylene oxide units overlaps that which is recited in Appellant’s claim 10. *Id.* The Office also asserted that based on paragraphs 0067-0069 of Bhatt, which discloses “a variety of conventional optional ingredients,” Bhatt discloses the water-soluble resin as recited in claim 10. Of the claimed features recited in claim 10, the Office thus apparently concluded that Bhatt lacks only a disclosure of tertiary amines. *See Id.*

To supply the missing features of Bhatt, the Office cited Kim. The Office asserted that Kim discloses cosmetically acceptable polyurethane resins that are formed, at least in part, from at least one diol, primary or secondary amino alcohol, primary or secondary diamine or primary or secondary triamine each with one or more tertiary, quaternary or protonated tertiary amine nitrogen atoms. (Office Action dated March 25, 2008, page 6). Based on the disclosures of Bhatt and Kim, the Office alleged that it would have been obvious to one of ordinary skill in the art at the time of the invention “to substitute the tertiary amines taught by Kim et al. for the amines taught by Bhatt et al. because of the expectation of achieving a hair spray formulations [*sic*] that in addition to imparting excellent set retention to the hair . . . additionally decrease the stickiness and brittleness of the product when applied to the hair and to maintain hair elasticity.” *Id.* In addition, the Office also alleged that it would have been obvious to substitute the tertiary amines taught by Kim for Bhatt’s amines “because Bhatt et al. teach diamines as part of their resins and Kim et al. teach diamines as interchangeable with tertiary for application to the hair.” *Id.*

The Office further indicated that for amines in polyurethane resins, “the carboxyl group and tertiary amine of the combined polyurethane resin result in an amphoteric

resin” and “the combined resin is a water-soluble resin.” (Office Action dated March 25, 2008, page 6).

1. Features of the Claimed Invention

As recited in independent claim 10, Appellants’ invention includes at least the following features which are neither disclosed nor suggested by the combination of Bhatt and Kim, namely:

a blend of an amphoteric urethane resin having at least one carboxyl group and at least one tertiary amino group in one molecule, and a water-soluble resin other than an amphoteric urethane resin. . . . (emphasis added).

Thus, as provided in independent claim 10, the claimed composition, among other features, requires a blend of an amphoteric urethane resin and a water soluble resin other than an amphoteric urethane resin. The amphoteric urethane resin has at least one carboxyl group, and it also has at least one tertiary amino group, both the at least one carboxyl group and the at least one tertiary amino group are in one molecule.

2. Response to Rejection of Claims 10-14, 17 and 20 under 35 U.S.C. 103(a)

As the Supreme Court reiterated in *KSR International Co. v. Teleflex Inc.* (KSR), 550 U.S. ___, 82 USPQ2d 1385 (2007), the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). Among the factual inquiries that must be addressed is to ascertain the differences between the claimed invention and the prior art. See *Id.* Further, “[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.” M.P.E.P. § 2142; see also, *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

a. The Combination of Bhatt in view of Kim Does Not Yield an Amphoteric Urethane Resin as Claimed By Appellants

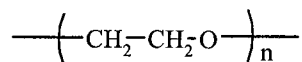
Appellants submit that Bhatt is directed towards aerosol and non-aerosol hair spray compositions containing hydrophilic, carboxylated polyurethane resins (Bhatt, at page 2, para. 0016 and page 3, para. 0030). The carboxylated polyurethane resin is produced by the reaction of (a) a polyoxyalkylene diol; (b) an alkylene glycol; (c) a diisocyanate; (d) water in an amount of about 0.001% to about 0.95% of the combined weight of the reactants; and (e) a 2,2-di(hydroxymethyl) alkanoic acid, wherein the ratio of NCO (isocyanate) groups to OH (hydroxyl) groups in the water, diol, and glycol mixture is about 0.4 to about 1.1 (Bhatt, at page 2, para. 0023; page 3, para. 0034 and 0035; and claim 1). Bhatt teaches that an amine, such as diglycol amine, can be substituted for at least a portion of the water in the reaction mixture (Bhatt, at page 3, para. 0034; page 4, para. 0036 and 0037; and Polyurethane Resin W Example).

In contrast to Bhatt, the cosmetic composition of the present invention includes a blend of an amphoteric urethane resin having at least one carboxyl group and at least one tertiary amino group in one molecule, and a water-soluble resin other than an amphoteric urethane resin. The differences between the polyurethane resin of Bhatt and the amphoteric urethane resin of the present invention are illustrated in the table below:

Amphoteric urethane resin of the present invention prepared from the reaction of the following:	Polyurethane resin of Bhatt prepared from the reaction of the following:
(a) polyol chosen from - (i) polyester polyol formed from the polymerization of a dicarboxylic acid and a polyhydric alcohol (p. 5, lines 12-20), and/or (ii) polyether polyol formed from the polymerization of, e.g., an alkylene oxide and a polyhydric alcohol (p. 5, line 21 – p. 6, line 7)	(a) alkylene glycol (para. [0035] and [0042]; no polyol according to the presently claimed invention)
(b) polyisocyanate (p. 6, line 8 – p. 7, line 2)	(b) organic diisocyanate (para. [0035] and [0043])
(c) compound having active hydrogen(s) and carboxyl group(s) (p. 7, lines 3-10)	(c) 2,2-di-(hydroxymethyl) alkanoic acid

(d) compound having active hydrogen(s) and tertiary amino group(s) (p. 7, lines 11-18)	(d) amines can be substituted for a portion of the water in the reaction mixture; no tertiary amines are taught (para. [0036]-[0037])
--	---

The amphoteric urethane resins of the present invention further include structural units derived from ethylene oxide of the following formula:



wherein n is 20 to 120 (see specification, at page 9, line 14 to page 12, line 3). The polyurethane resin of Bhatt is formed utilizing a polyoxyalkylene diol such as a block copolymer of ethylene oxide and propylene oxide (Bhatt, at page 3, para. 0035 and page 4, para. 0038-0041).

From the above summary it is seen that the polyurethane resin of Bhatt differs from the amphoteric urethane resin of the claimed invention in that Bhatt does not include compounds (a) and (d) used in polymerizing the amphoteric urethane resin of the present invention. Specifically, the present invention utilizes a polyol chosen from the reaction product of a polyhydric alcohol and a dicarboxylic acid or an alkylene oxide, whereas Bhatt utilizes an alkylene glycol. In the Advisory Action dated October 30, 2008, at page 2, the Office indicated that "Bhatt et al. utilizes alkylene glycol which renders obvious polyether polyol." Appellants submit, however, that this statement is merely conclusory and that "rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396 quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). Accordingly, the Office's reliance on this unsupported statement in establishing a *prima facie* case of obviousness is improper and the rejection should be reversed as being on based on improper grounds.

Notwithstanding, as admitted by the Office, the claimed invention utilizes a compound having active hydrogen(s) and tertiary amino group(s), whereas Bhatt only

substitutes mono- or diamines for water in its reaction mixture. Accordingly, the polyurethane resin of Bhatt is prepared using at least two different compounds from that used in preparing the amphoteric urethane resin of the present invention. Appellants submit that one of ordinary skill in the art would have recognized that the polymerization of different reaction products would not result in the same compounds.

Appellants submit that Kim is relied upon by the Office for its teachings of polyurethane resins wherein diamines and tertiary amines are allegedly taught as interchangeable, and therefore, as the Office alleges, one of ordinary skill in the art would have been motivated to substitute the diamines of Bhatt with the tertiary amines of Kim. As shown above, the Office has not established that Bhatt discloses or suggests the use of the polyol in forming the presently claimed amphoteric urethane resins. Appellants submit that Kim likewise does not disclose or suggest the use of such polyols in the formation of its cationic polyurethanes. Accordingly, even if one of ordinary skill in the art was motivated by Kim to substitute its tertiary amine with the primary or secondary amines of Bhatt, one of ordinary skill in the art would still not have all the elements used in forming the amphoteric urethane resin of the present invention.

Notwithstanding the above, even if one of ordinary skill in the art would have been motivated to attempt to include an amine group of Kim in the polyurethane resin of Bhatt (which Appellants do not concede), Appellants submit that the Office still has not presented a *prima facie* case of obviousness. First, neither Bhatt nor Kim, either alone or in their combination, disclose or suggest that their polyurethane resins could be amphoteric urethane resins. Second, merely substituting the tertiary amines of Kim for the primary and secondary amines of Bhatt, as the Office proposes, would not yield the amphoteric urethane resin as claimed by Appellants in independent claim 10.

With regard to this second point, Bhatt discloses the use of carboxylated polyurethane resins. According to Bhatt, its "[t]he polyurethane resins are linear, hydroxyl-terminated copolymers having pendant carboxylic acid groups." (Bhatt at page 2, para. 0031). Further, Bhatt does not appear to disclose the use of cationic monomers (e.g. nitrogen containing monomers) in the preparation of its urethanes.

Consequently, the polymers of Bhatt are anionic. The amines disclosed in Bhatt are those with active hydrogens, for example ethylenediamine, propylenediamine, monoethanolamine, diglycolamine, and JEBFFAMINE D1-230, D400, D2000, D4000, ED-0600, ED-900, or ED-0600. (See e.g. Bhatt, at page 4, para. 0036 and 0037.) These amines are such that the amine group is polymerizable, i.e. reactive towards the isocyanates. It is basic chemistry that primary, e.g. ethylene diamine, and secondary amines react with isocyanates to form urea linkages. The reaction, however, does not produce cationic products. Appellants also note that it is well known that tertiary and quaternary amine groups are not reactive with isocyanates. Tertiary and quaternary amine groups do not contain an active hydrogen (i.e. they are functional amines) and thus cannot be used in a reaction with an isocyanate. Accordingly, although the Office alleges that Bhatt discloses "amines generally," Appellants submit that the Office's assertion extends the teachings of Bhatt beyond what Bhatt fairly discloses to one of ordinary skill in the art.

Kim, on the other hand, teaches the synthesis of cationic urethanes by incorporating tertiary and quaternary groups. Kim does not, however, disclose or suggest the use of a carboxylic acid monomer in conjunction with the cationic materials. The Office alleges that "Kim et al. teach diamines as interchangeable with tertiary for application to the hair." (Office Action dated March 25, 2008, page 6). Contrary to the Office's allegation, Appellants have not found such a disclosure in Kim, nor has the Office cited where in Kim this teaching is disclosed. Rather, it appears that according to Kim, 1) primary or secondary diamines, or 2) primary or secondary triamines, each with one or more tertiary, quaternary or protonated tertiary amine nitrogen atoms are suggested as being interchangeable. (See e.g., Kim, at col. 2, lines 22-24 and col. 6, line 67- col. 7, line 2). However, there does not appear to be any disclosure or suggestion that the diamines (polymerizable amines) are interchangeable with the tertiary amines (functional amines). Thus, Appellants submit that neither Bhatt nor Kim alone or in their combination disclose or suggest Appellants amphoteric urethane resin as recited in claim 10.

Moreover, Appellants submit that contrary to the Office's assertions, one of ordinary skill in the art would not have substituted the tertiary amines of Kim for the carboxylic acid groups of Bhatt because the tertiary amines of Kim would not be reactive with the isocyanates of Bhatt, as the primary and secondary amine groups are. The tertiary amine groups would instead act as cationic substituents, i.e. they would, if they would be substituted at all, be substitutable with the carboxylic acid/carboxylate groups of Bhatt, thus rendering Bhatt cationic. In contrast, the tertiary amino groups as included in the composition claimed by Appellant are reactive substituents that ionically bond with the carboxyl group(s) thus rendering the claimed urethane resin amphoteric. In other words, to obtain an amphoteric urethane resin as claimed by Appellants, one of ordinary skill in the art would not be able to merely substitute the tertiary amine groups of Kim for primary or secondary groups of Bhatt. This is because, contrary to the Office's allegation the two amine groups are not interchangeable so as to ultimately arrive at Appellants' claimed invention.

Consequently, Appellants submit that a urethane resin having at least one carboxyl group and at least one tertiary amino group in one molecule, would not have been obvious from the disclosures of Bhatt and Kim because the amino group functionalities of the composition of the present invention and the amino group functionalities disclosed in the Office's proposed combination of Bhatt and Kim each involve different chemistries, resulting in different products. Thus, the Office's proposed combination would not work to yield Appellants' invention as recited in independent claim 10. For at least these reasons, Appellants submit that the Office's rejection of independent claim 10 should be reversed and withdrawn.

b. The Reliance on the Disclosure of Bhatt for the Claimed
"Water Soluble Water-Soluble Resin Other than an
Amphoteric Urethane Resin" Is Improper

Bhatt does not teach or suggest cosmetic compositions that include both a water-soluble resin and the amphoteric urethane resin. More specifically, with reference to the presently claimed invention, Bhatt does not teach or suggest water soluble resins that

improve the durability (see p. 26 of the present Specification) of a cosmetic composition, particularly in combination with an amphoteric resin. Water-soluble resins (or polymers) according to the present invention provide durability to the cosmetic composition, a function that the amphoteric polyurethanes are unable to provide. These water-soluble polymers that are blended with the amphoteric resins are described at page 15, line 3 to page 18, line 10 of the present application.

In making its rejection, the Office asserts that Bhatt discloses that Bhatt's hair spray compositions "contain a variety of conventional optional ingredients including emulsifiers, such as anionic or nonionic surfactants, preservatives, cationic conditioners . . ." that Bhatt therefore, "discloses water-soluble polymers (anionic and nonionic surfactants, silicones, protein hydrosylates, ethylene adducts, and polyoxyethylene cholesterol) other than the amphoteric resin. (Advisory Action dated October 30, 2008, at page 2). As a result, the Office maintains that Bhatt discloses the addition of water soluble resins in the claimed cosmetic composition.

Although Bhatt does disclose optional ingredients that may be water soluble, Appellants respectfully disagree with the Office's conclusion that based on the general disclosure of optional ingredients in Bhatt, it would have been obvious to one of ordinary skill in the art to include a water-soluble resin in a blend with an amphoteric urethane resin. More specifically, the Office has not articulated any reason why one of ordinary skill in the art would have chosen to blend an amphoteric urethane resin as recited in claim 10 with a water-soluble resin other than an amphoteric urethane resin. Appellants submit that, essentially, the Office's rejection is based on the statement that "the modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were individually known in the art. . . ." Appellants submit that this "is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references." (emphasis added). (See *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)). As noted above, "rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated

reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396 (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Here, there are a number of non-water soluble polymers, water-soluble but non-polymer materials, and many materials that are not resins from which one of ordinary skill in the art could have selected.

Appellants submit that only through Appellants' application, used as a roadmap, has the Office been able to pick and choose only those features of Bhatt that are necessary to allegedly render the invention obvious, to the exclusion of the other litany of conventional optional ingredients disclosed, where Bhatt does not provide any guidance for choosing certain optional components over others. Appellants submit that it is improper for the Office to rely on improper hindsight to render obvious Appellants' invention.

At best, it appears that the Office has engaged in an improper "obvious to try" rationale for the conclusion of obviousness. However, "obvious to try" is not the standard under § 103, when directed to two kinds of error. According to the M.P.E.P., these two kinds of error are as follows:

In some cases, what would have been 'obvious to try' would have been to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful.... In others, what was 'obvious to try' was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it." *In re O'Farrell*, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988) (citations omitted)" See M.P.E.P. § 2145(X)(B).

Here, what might have been obvious to try would have been to try all of the possible conventional optional ingredients of Bhatt (assuming, *arguendo*, that one of ordinary skill in the art had arrived at Appellants' claimed amphoteric urethane resin) by blending them with the polyurethane resin of Bhatt without any reason in Bhatt for doing so, and,

in the process happening to come across the combination that provides both touch and durability versus a cosmetic composition having only a water-soluble resin or an amphoteric resin. Bhatt neither indicates which parameters would have been critical or which of the many possible choices would have been successful to yield Appellants' invention. Moreover, given the understanding of one of ordinary skill in the art at the time of the invention, Appellants submit that it is unlikely that such a person would have included anionic and nonionic surfactants and cationic conditioners in the category of water-soluble polymers as providing durability (hold) to a cosmetic composition. Rather, such ingredients would have been known to be utilized to reduce surface tension in a composition. Moreover, these ingredients, blended together with an amphoteric polyurethane, would not solve the problem of providing a cosmetic composition that provides both touch and durability versus a cosmetic composition having only a water-soluble resin or an amphoteric urethane resin.

For all of the above reasons, Appellants submit that the currently pending rejections of independent claim 10, and its dependent claims 11-14, 17 and 20, are improper and should be reversed and withdrawn.

Furthermore, claims 11-13 and 16 stand rejected as obvious over Bhatt in view of Kim. As admitted by the Office, both Bhatt and Kim lack a polysiloxane bond and an anionic, nonionic and cationic resins. (See Office Action dated March 25, 2008, at page 7). For at least this additional reason, the rejection of these pending claims should be reversed and withdrawn, the patentability of which is argued separately.

B. Rejection of Claims 11-13, 16 and 19 under 35 U.S.C. 103(a) and Response with Respect Thereto

The Office rejects dependent claims 11-13, 16 and 19 as obvious over the combination of Bhatt in view of Kim, as applied to claims 10-14, 17 and 20, and further in view of de la Poterie in view of Bolich, Jr. More specifically, the Office asserts that de la Poterie discloses anionic, cationic nonionic or amphoteric polyurethanes and mixtures thereof as film forming polymers, as well as the polyurethane comprising at least one

silicone-containing block. Bolich, Jr. is included for the disclosure of silicones, in the form of resins, as hair conditions.

Appellants submit that de la Poterie is cited by the Office for its teaching of polyurethane copolymers comprising anionic, cationic, nonionic or amphoteric polyurethanes and mixtures thereof, as well as at least one silicone-containing block. Appellants submit, however, that de la Poterie does not teach or suggest amphoteric urethane resins formed from the reaction products of, among other, the presently claimed polyol. Further, de la Poterie does not teach or suggest the use of water-soluble resins in combination with its polyurethane copolymers. For at least these reasons, de la Poterie does not make up for the deficiencies of Bhatt or Kim, as set forth above. As such, even in combination, the references fail to disclose or suggest all the elements of the present invention, as recited in claims 11-13, 16 and 19.

Bolich, Jr. is cited by the Office for teaching silicones in the form of resins as hair conditioners. Appellants submit, however, that Bolich, Jr. does not teach or suggest the claimed amphoteric urethane resins of the present invention. Further, Bolich, Jr. does not teach or suggest water-soluble polymers for providing cosmetic compositions with improved durability. Instead, the polymers of Bolich, Jr. serve in rheology modification (thickening), not durability. One skilled in the art would not consider the polymers of Bolich, Jr. as functioning in improving durability. For at least these reasons, Bolich, Jr. does not make up for the deficiencies of Bhatt or Kim, as set forth above.

Furthermore, Appellants submit that Bolich, Jr. teaches away from Appellants' invention. It is improper to combine references where the references teach away from their combination. See *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). More specifically, at col. 13, line 56 to col. 14, lines 19, Bolich, Jr. discloses silicon resins useful in its alleged invention. Contrary to the water-soluble resin other than an amphoteric urethane resin, as recited in the pending claims, Bolich, Jr. discloses silicone polymers that are water insoluble. For example, Bolich, Jr. discloses monomethyl, dimethyl, monophenyl, among others and describes its preferred resin as "provided as a solution in a toluene which is stripped prior to the resin's use" (Bolich,

Jr., at col. 13, lines 60-65). Further, other rigid silicone polymers of use are siloxanes that are “soluble in solvents such as cyclomethicone.” (Bolich, Jr., at col. 13, lines 60-65). Accordingly, Appellants submit that Bolich, Jr. teaches away from Appellants’ invention and consequently the rejection is improper and should be reversed and withdrawn.

IX. CONCLUSION

In view of the arguments presented herein Appellant respectfully submits that the appealed claims stand improperly rejected. The rejection of the appealed claims of record should be reversed with instructions to allow these claims over the cited references. Such action is hereby respectfully requested.

Respectfully submitted,

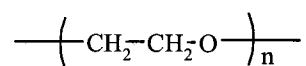


James C. Abruzzo
Attorney for Applicants
Reg. No. 55,890

Akzo Nobel Inc.
Legal & IP
120 White Plains Road, Suite 300
Tarrytown, NY 10591
(914) 333-7448

X. CLAIMS APPENDIX

10. A cosmetic composition comprising a blend of an amphoteric urethane resin having at least one carboxyl group and at least one tertiary amino group in one molecule, and a water-soluble resin other than an amphoteric urethane resin,
wherein the blend of the amphoteric urethane resin and water soluble resin provide a cosmetic resin having both touch and durability versus a cosmetic composition having only a water-soluble resin or an amphoteric urethane resin,
wherein the amphoteric urethane resin is formed from the reaction of a polyol chosen from polyester polyol and/or polyether polyol, a polyisocyanate, a compound having active hydrogen(s) and carboxyl group(s), and a compound having active hydrogen(s) and tertiary amino group(s), and
wherein the amphoteric urethane resin has structural units derived from ethylene oxide (EO) of the following general formula –



wherein n is 20 to 120.

11. The cosmetic composition of claim 10, wherein the water-soluble resin is a nonionic resin.
12. The cosmetic composition of claim 10, wherein the water-soluble resin is an anionic resin.
13. The cosmetic composition of claim 10, wherein the water-soluble resin is a cationic resin.
14. The cosmetic composition of claim 10, wherein the water-soluble resin is an amphoteric resin.

16. The cosmetic composition of claim 10, wherein the amphoteric urethane resin has in its structure at least one polysiloxane bond.
17. The cosmetic composition of claim 10, wherein the amphoteric resin is in an aqueous liquid.
19. The cosmetic composition of claim 16, wherein the amphoteric resin is in an aqueous liquid.
20. The cosmetic composition of claim 10, wherein such composition is selected from the group consisting of a hair cosmetic, a skin care cosmetic and a make-up cosmetic.

XI. Evidence Appendix

None.

XII. Related Proceedings Index

None.